Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Previously Presented) An isolated polynucleotide, comprising a nucleic acid having a nucleotide sequence selected from the group consisting of:

(i) the full-length sequences set forth in SEQ ID NO: 6, SEQ ID NO: 9, and SEQ ID NO: 12; and

(ii) the full-length complementary sequences to the sequences set forth in (i).

2–6. (Canceled)

7. (Previously Presented) An isolated retroviral polynucleotide comprising an env gene, wherein said env gene comprises a nucleic acid having a nucleotide sequence selected from the group consisting of the full-length sequence set forth in SEQ ID NO: 9, and the full-length complementary sequence thereof.

8. (Canceled)

9. (Previously Presented) An isolated retroviral polynucleotide comprising an env gene, wherein said env gene encodes a polypeptide having the peptide sequence set forth in SEQ ID NO: 10.

10–13. (Canceled)

14. (Previously Presented) An isolated fragment comprising a polynucleotide having a nucleotide sequence selected from the group consisting of:

(i) the full-length sequences set forth in SEQ ID NO: 6, SEQ ID NO: 9, and SEQ ID NO: 12; and

(ii) the full-length complementary sequences to the sequences set forth in (i).

15. (Previously Presented) The fragment according to claim 14, consisting of a polynucleotide having a nucleotide sequence selected from the group consisting of:

(i) the full-length sequences set forth in SEQ ID NO: 6, SEQ ID NO: 9, and SEQ ID NO: 12; and

(ii) the full-length complementary sequences to the sequences set forth in (i).

16–25. (Canceled)

26. (Currently Amended) A method for detecting a retrovirus associated with multiple sclerosis and/or rheumatoid arthritis, the method comprising:

a) obtaining and preparing ~~in~~ a biological sample ~~characterized in that an RNA and/or a DNA assumed to belong to or obtained from said retrovirus, or their complementary RNA and/or DNA, is brought into contact~~ from a patient suspected of being infected with a multiple sclerosis- or rheumatoid arthritis-related retrovirus,

b) transferring nucleic acids present in the sample to a solid substrate and denaturing the nucleic acids,

c) contacting the nucleic acids of the sample obtained in b) with a ~~composition~~ probe comprising ~~a nucleotide~~ the isolated fragment according to claim 14, under conditions that allow specific binding between the probe and target RNA and/or DNA,

d) washing the sample of c) to remove nonspecifically bound nucleic acids, and

e) detecting a hybridization complex that remains on the solid substrate.

27–59. (Canceled)

60. (Previously Presented) The isolated polynucleotide according to claim 1, wherein said polynucleotide is DNA.

61. (Previously Presented) The isolated polynucleotide according to claim 1, wherein said polynucleotide is RNA.

62. (Previously Presented) The isolated polynucleotide according to claim 1, wherein said polynucleotide is genomic DNA.

63. (Previously Presented) A recombinant vector comprising the polynucleotide defined in claim 1.

64. (Previously Presented) An expression vector comprising the polynucleotide defined in claim 1.

65. (Canceled)

66. (Previously Presented) The isolated polynucleotide of claim 1, wherein said nucleotide sequence is selected from the group consisting of:

(a) the full-length sequences set forth in SEQ ID NO: 6 and SEQ ID NO: 9; and

(b) the full-length complementary sequences to the sequences set forth in (a).

67. (Previously Presented) An isolated polynucleotide encoding an amino acid sequence as set forth in SEQ ID NO: 7, SEQ ID NO: 10, or SEQ ID NO: 13.